

WHAT IS CLAIMED IS:



1. A seal assembly comprising:
a support;
an outer seal extending circumferentially around a radially outer surface of the support; and
an inner seal extending circumferentially around a radially inner surface of the support.
2. The seal assembly according to claim 1 wherein the outer seal extends around an outer peripheral surface of the support.
3. The seal assembly according to claim 1 wherein the inner seal extends around an inner peripheral surface of the support.
4. The seal assembly according to claim 1 wherein the outer seal extends around an outer peripheral surface of the support, and wherein the inner seal extends around an inner peripheral surface of the support.
5. The seal assembly according to claim 4 wherein the support comprises a tubular member.
6. The seal assembly according to claim 1 wherein the support comprises an annular base member.
7. The seal assembly according to claim 6 wherein the inner seal is disposed at a radially inner edge of the base member.
8. The seal assembly according to claim 6 wherein the support further comprises an inner ledge extending from a radially inner side of the base member.

9. The seal assembly according to claim 8 wherein the inner ledge comprises an inner tubular member.

10. The seal assembly according to claim 9 wherein the inner tubular member includes a radially outwardly extending protuberance spaced apart from the base member.

11. The seal assembly according to claim 9 wherein the inner tubular member extends from a radially inner edge of the base member.

12. The seal assembly according to claim 11 wherein the inner seal is disposed at a radially inner edge of the base member opposite the inner tubular member.

13. The seal assembly according to claim 6 wherein the support further comprises an outer ledge extending from a radially outer side of the base member.

14. The seal assembly according to claim 13 wherein the outer ledge comprises an outer tubular member.

15. The seal assembly according to claim 14 wherein the outer seal is disposed around an outer peripheral surface of the outer tubular member.

16. The seal assembly according to claim 6 wherein the support further comprises:
an inner ledge extending from a radially inner side of the base member; and
an outer ledge extending from a radially outer side of the base member.

17. The seal assembly according to claim 16 wherein the inner ledge comprises an inner tubular member, and wherein the outer ledge comprises an outer tubular member.

18. The seal assembly according to claim 17 wherein the inner tubular member includes a radially outwardly extending protuberance spaced apart from the base member.

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19. The seal assembly according to claim 17 wherein the inner tubular member extends from a radially inner edge of the base member.

20. The seal assembly according to claim 19 wherein the inner seal is disposed at a radially inner edge of the base member opposite the inner tubular member, and wherein the outer seal is disposed around an outer peripheral surface of the outer tubular member.

21. The seal assembly according to claim 20 wherein the inner tubular member and the outer tubular member extend from a same side of the base member.

22. An adapter assembly for a bicycle bottom bracket comprising:
a tubular adapter member having an inner peripheral surface;
a seal assembly comprising:
an annular base member;
an outer seal extending circumferentially around a radially outer surface of the base member and contacting the adapter member; and
an inner seal extending circumferentially around a radially inner surface of the base member.

23. The adapter assembly according to claim 22 wherein the seal assembly further comprises:

an inner ledge extending from a radially inner side of the base member; and
an outer ledge extending from a radially outer side of the base member;
wherein the outer seal is disposed between the outer ledge and the inner peripheral surface of the adapter member.

24. The adapter assembly according to claim 23 wherein the inner seal is disposed at a radially inner edge of the base member.

25. The adapter assembly according to claim 24 wherein the inner ledge includes a radially outwardly extending protuberance spaced apart from the base member.

26. The adapter assembly according to claim 24 further comprising a bushing disposed at the inner peripheral surface of the adapter member and facing the inner ledge.

27. The adapter assembly according to claim 26 wherein the bushing includes a radially inwardly extending bushing protuberance.

28. The adapter assembly according to claim 27 wherein the bushing protuberance is disposed at a central portion of the bushing.

29. The adapter assembly according to claim 24 wherein the inner ledge and the outer ledge extend from a same side of the base member.

30. The adapter assembly according to claim 29 wherein the inner ledge comprises an inner tubular member, and wherein the outer ledge comprises an outer tubular member.

31. The adapter assembly according to claim 30 further comprising an annular bushing disposed at the inner peripheral surface of the adapter member and facing the inner tubular member.

32. The adapter assembly according to claim 31 further comprising a bearing disposed between the bushing and the inner tubular member.

33. The adapter assembly according to claim 32 wherein the bearing comprises:
an inner bearing race;
an outer bearing race; and
a plurality of ball bearings disposed between the inner bearing race and the outer bearing race.

34. The adapter assembly according to claim 33 wherein the bushing includes a radially inwardly extending bushing protuberance.

35. The adapter assembly according to claim 34 wherein the bushing protuberance is disposed at a central portion of the bushing.

36. The adapter assembly according to claim 33 wherein the bushing and the inner tubular member both are formed of a nonmetallic material.

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